

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
24 March 2005 (24.03.2005)

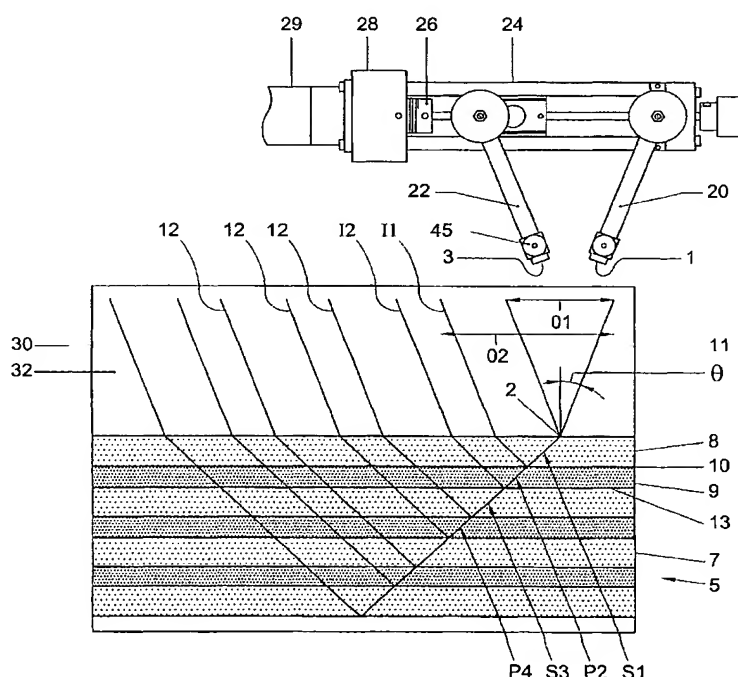
PCT

(10) International Publication Number
WO 2005/026716 A1

- (51) International Patent Classification⁷: **G01N 29/10**, 29/06 // G01B 17/02
- (21) International Application Number: PCT/NL2004/000640
- (22) International Filing Date: 15 September 2004 (15.09.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 03077925.0 16 September 2003 (16.09.2003) EP
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

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(54) Title: AN ACOUSTIC TESTING APPARATUS FOR TESTING A LAMINATE MATERIAL AND AN ACOUSTIC TESTING METHOD FOR TESTING A LAMINATE MATERIAL



(57) Abstract: An acoustic testing apparatus for testing a laminate material comprising at least one layer of a first material having a first velocity for a first vibration mode and at least one layer, adjacent to said first layer, of a second material having a velocity for a second vibration mode, approximately equal to said first velocity, said acoustic testing apparatus comprising: a first transducer for projecting an acoustic test signal onto a first layer of said at least one layer of a first material disposed in a testing zone, wherein a second transducer for receiving said test signal from said testing zone, and in that said first transducer is adapted to project said test signal at an angle so as to generate in said first layer vibrations of at least said first vibration mode, wherein said vibrations of said first vibration mode are incident on an interface with said layer of said second material under an incidence angle so as to produce in said second layer vibrations of at least said second vibration mode, so that refraction of said test signal at said interface is suppressed.



FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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